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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,935	11/21/2003	Yang Hwan No	K-0553	7540
34610	7590	05/17/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			PATEL, RITA RAMESH	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 05/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,935

Applicant(s)

NO ET AL.

Examiner

Rita R. Patel

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119.

Drawings

The drawings received 11/21/03 are acceptable for examination purposes.

Claim Objections

Claim 6 is objected to because of the following informalities: applicant claims "thee water flows along an outer circumference"; it appears that the word 'thee' has been incorrectly spelled, the Office will assume the word 'the' was meant to be used here for the purposes of examination. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "as claimed in claim 1, wherein the motor" in the first line of claim 9, however, there is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "as claimed in claim 1, wherein the heater" in the first line of claim 15, however, there is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "as claimed in claim 14, wherein the second tub" in the first line of claim 16, however, there is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "as claimed in claim 14, wherein the second rib is provides in a vicinity of right and left side of the terminal" in the first and second lines of claim 17, however, there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Zahn (US Patent No. 6,354,115).

Zahn teaches a two-component seal for the spin tub of a washing machine. The two-component seal is disposed about the tub opening and a metal shroud seal to

prevent water in the washer from entering a motor and bearing space (Abstract). The top seal embodies a stiffener made of metal and the bottom seal has a resilient metallic stiffener enclosed by a resilient bottom cover. In Figure 1, Zahn shows a clothes washing machine 12 which includes an outer container 20 and a perforated spin tub 22. An agitator 24 on shaft 26 in the middle of the washing machine 12 oscillates while the outer container 20 and spin tub 22 remain stationary. After the clothes are washed, the water is pumped from the outer container 20. Next, the spin tub 22 rotates at a rapid rate of speed to centrifugally force water from the clothes through perforations 30 in the spin tub 22. Zahn discloses that in Figures 2 and 3, a two-component tub seal 32 is disposed about the spin tube 28 to prevent water from entering a space housing a bearing 34 and motor/transmission assembly. This is desirable because water present in the outer tub 20 can adversely affect functionality of the bearing 34 and motor/transmission assembly. The two-component tub seal 32 has a top seal 40, seal 42 and shroud seal 50 (col. 2, lines 5, 11-2, 62-67; col. 3, lines 1-15). In Figures 2 and 3 of Zahn, it is seen that the sealing members of tub seal 32 are formed to divert water from accessing the electric apparatus therein by providing a water passageway to guide the flow of liquid. Also, Zahn teaches that the top seal 40 has a lip 56 which engages a hollow 57 on a vertical surface of an interior wall 58 of the outer tub 20, the bottom seal 42 has a resilient metallic bottom stiffener 80 enclosed by a resilient bottom cover 82, and the bottom seal 42 has a vertical wall 86 and a horizontal flange 88 (col. 3, lines 22-24, 30-31, 35-36); lips 56 and/or vertical wall 86 would thus read on applicant's claim wherein the protecting member contains ribs therein proximal of the electrical

components of said apparatus. In Figure 1 of Zahn, the motor/transmission assembly is shown at the bottom/rear of the apparatus in reference to the door opening 16. The rib-like structures of the sealing members of Zahn, annular wedges 90, are illustratively shown to have a foreordained structural curvature (Fig. 3). As seen in Figure 1, lips 56 of top seal 40 provides a predetermined gap from the sealing members and the motor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zahn as applied to claim 1 above, and further in view of Ito et al. herein referred to as "Ito" (US Patent No. 6,564,594).

Although Zahn does not explicitly state where a heater may be enclosed within said invention, the position is taken that one of ordinary skill in the art at the time of the invention would find it obvious that a heater would be comprised therein the rear part of said washing machine in conjunction with the motor/transmission assembly as is commonly known in the art, moreover, Zahn states "The bottom seal 42 has a resilient metallic bottom stiffener 80 enclosed by a resilient bottom cover 82. The resilient bottom cover 82 is typically made of elastomeric materials but may be made from other heat resistant resilient material" (col. 3, lines 30-34), thereby implicating resistance of

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heat by said sealing means as a result from the heater and motor/transmission assembly located in proximity. However, Ito further reinforces the concept of a washing machine with a heater placed therein the rear wall of the washing tub. Ito teaches a drum type washing machine including an outer cabinet having a rear wall, a water tub, a drum type rotating tub and electric motor (Abstract). Therein disposed is a heater 82 serving as heating means provided on the lower circumferential wall of the water tub 8. The heater 82 comprises a casing 82a mounted by screws on the water tub 8 and a heating element 82b, such as a sheathed heater, accommodated in the casing 82a. The heater 82 applies heat to the water in the water tub 8 so that the water is made into hot water (col. 8, lines 13-20).

Zahn fails to disclose a terminal for supplying power to the heater, however, the position is taken that one of ordinary skill in the art would at once envisage that a power supply for said heater is supplied therebelow the heater and motor/transmission assembly to avoid interference with washing functions in the tub thereabove; hence top and bottom sealing members taught by Zahn would be placed within vicinity of said power supply, in locations above and to the right and left of the terminal.

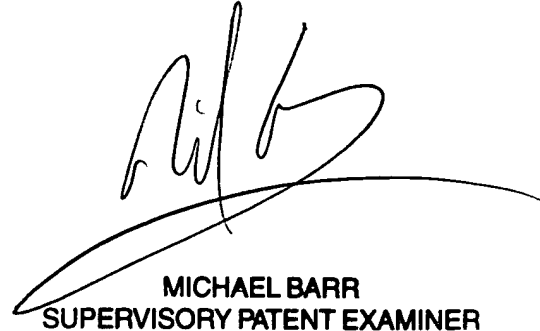
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RRP



MICHAEL BARR
SUPERVISORY PATENT EXAMINER